

RECEIVED
CENTRAL FAX CENTER

OCT 19 2007

Amendments to the claims

1. (canceled)

2. (withdrawn)

3. (canceled)

Claims 4-8 (withdrawn)

9. (canceled)

Claims 10-11 (withdrawn)

12. (new) A prosthetic or orthotic leg comprising, in combination,

a mounting member for attaching said prosthetic or orthotic leg to a biological limb of a human body,

a support member connected at its upper end at a knee joint for rotation with respect to said mounting member,

a foot member including a rearwardly extending heel portion and a forwardly extending toe portion that make periodic bearing contact with the ground during a walking, running or jumping gait cycle of said human body, said foot member being connected at an ankle joint to the lower end of said support member for rotation relative to said support member,

a first spring for storing energy when said support member rotates about said knee joint to move said foot member rearwardly with respect to said knee joint and for releasing energy to rotate said support member about said knee joint to extend said support member, and

a second spring for storing energy when said support member is rotated about said knee joint to extend said support member and for releasing energy to rotate said foot member about said ankle joint to increase the bearing force applied to the ground by said toe portion.

13. (new) The prosthetic or orthotic leg set forth in claim 12 wherein first spring stores energy when said support member rotates about said knee joint to move said foot member rearwardly with respect to said knee joint during an early stance knee flexion stage of said gate cycle that follows heel-strike when said heel portion of said foot member first contacts the ground and provides shock absorption and maintains the center of gravity of said human body at a more constant level

14. (new) The prosthetic or orthotic legs set forth in claim 13 wherein energy released by said first spring is transferred to said second spring as said support member rotates about said knee joint to extend said support member.

15. (new) The prosthetic or orthotic leg set forth in claim 12 wherein said second spring also stores energy during a dorsi-flexion stage of said gate cycle when said support member rotates forwardly about said ankle joint as said foot member remains in contact with the ground.

16. (new) The prosthetic or orthotic leg set forth in claim 15 wherein energy released by said first spring is transferred to said second spring as said support member rotates about said knee joint to extend said support member.

17. (new) The prosthetic or orthotic leg set forth in claim 16 wherein said first spring is connected between said support member and a connecting point that moves relative to said support member as said support member rotates about said knee joint.

18. (new) The prosthetic or orthotic leg set forth in claim 17 wherein said second spring is connected between said foot member and said support member to store and release energy as said foot member rotates about said ankle joint.

19. (new) The prosthetic or orthotic leg set forth in claim 12 wherein energy released by said first spring is transferred to said second spring at a predetermined time during said gate cycle.

20. (new) The prosthetic or orthotic leg set forth in claim 12 wherein energy released by said first spring is transferred to said second spring while said support member rotates about said knee joint to extend said support member.

21. (new) The prosthetic or orthotic leg set forth in claim 12 wherein said second spring releases energy during the powered plantar-flexion stage of said gate cycle when the said toe portion of said foot member presses against the ground and raises said heel portion from the ground delivering power to the walking step to slow the fall of the body prior to the adjacent leg of said human body making bearing contact with the ground.

22. (new) The prosthetic or orthotic leg set forth in claim 12 wherein said first spring is connected between said support member and a connecting point that moves relative to said support member as said support member rotates about said knee joint.

23. (new) The prosthetic or orthotic leg set forth in claim 22 wherein said second spring is connected between said foot member and said support member to store and release energy as said foot member rotates about said ankle joint.

24. (new) The prosthetic or orthotic leg set forth in claim 12 wherein said second spring is connected between said foot member and said support member to store and release energy as said foot member rotates about said ankle joint.

25. (new) The prosthetic or orthotic leg set forth in claim 24 further including a mechanism for connecting said first spring to said second spring at a predetermined time in said gate cycle